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### Proposed Action

CONFIDENTIAL

The proposed action consists of a mining plan submitted under the provisions of 30 CFR part 231.10 of the Federal Regulations by The Anaconda Company on November 13, 1972. The plan is for a small underground uranium mining operation on Laguna Indian Tribal lands, in Valencia County, New Mexico, held under a mining lease by the company. It entails the trackless development of several small ore bodies with a 450-foct long adit and sufficient drifting to provide for their extraction by both longuall stoping with a mechanical mining machine and sublevel stoping with conventional mining equipment. The ore bodies lie within the Jackpile sandstone unit of the Jurassic Marrison formation at a depth of about 200 feet below the lend surface Operations are scheduled to commence sometime during February 1973.

ENVIRONMENTAL IMPACT ANALYSIS

# Location and Natural Setting

The involved lands comprise about 20 acres within sections 2 and 3, T. 10 N., R. 5 W., NMPM, Valencis County, New Mexico, and are inside of the boundaries of the company's mining lease No. 1 (approved July 31, 1952) on Laguna Indian Tribal lands. They are located about 8.5 miles north of Laguna Pueblo on Interstate Highway I-40. The subject area is situated on the northeasterly sloping flank of North Oak Canyon Mesa well above the intermittently flowing Rio Paguate River at its base. This small area is located about 3,000 feet southwest of the crusher and ore loading station for the nearby active Jackpile and Paguate open-pit mines that are also within the boundaries of lease No. 1.

The climate is semiarid, the annual precipitation ranging from 4 to 18 inches and averaging about 9 inches per year. The summers are generally hot, the winters moderately cold and the mean yearly temperature is about 53° F. The thin sandy mantle of soil covering the area supports a sparse and scattered growth of native grasses studded by occasional clumps of desert shrubs.



The principal use made of the general land area is for surface mining operations, but the subject area is presently unused. The grazing potential of the land is very low and it has no value for agricultural enterprise. The entire leased area is posted and not open to public inspection or use owing to the hazards created by the mining operations. No indian ruins, burial or religiously significant sites are situated in or near the subject area. Local scenic attractions such as the indian villages of Paguate and Cebolleta in the general vicinity are accessable to tourists and a good, but distant view of the open-pit mining operations may be had from Paguate.

## Effects on the Environment

The potential impact of the proposed mining operations on the environment is slight. It appears to be mostly confined to the disturbance of a relatively small part of the involved land surface, and the unavoidable distruction of the scant vegetation thereon by the construction of the surface plant facilities, access roads and the various mine openings.

The planned methods of ground support should be adequate to prevent surface subsidence above the underground workings. However, wastefilling of stoped-out areas will be required if necessary.

The mine workings should be dry becasue they will be situated above both the natural surface drainage areas and the ground water table. Introduced water should be confined to the small and insignificant quantity needed for drilling. If surface run-off water should enter the mine, it will be drained to existing sewage lagoons and evaporation areas. Sewage from the proposed change house will be piped to the sewage lagoons being used by the present mine staff housing area.

The possibility of any significant amount of air pollution is remote because of the absence of any sizable contributory sources in either the surface plant installations or the underground operations.

Noise generated by the air compressor engine will be reduced to a negligible intensity by muffling the exhaust. Road dust will be allayed by tank truck sprinklers with water from the centralized collection pond for the open-pit operations.

No adverse comments about the plan have been received from the Laguna Tribal Council or the Bureau of Indian Affairs, and no highly controversial issues are involved.

### Alternatives

No reasonable alternatives exist, and no other mining method, or modification of the one proposed would minimize or reduce the possible damage to the environment.

# Unavoidable Adverse Environmental Effects

The only unavoidable adverse effect on the environment of consequence is the expected damage to the vegetation resulting from the construction of the surface facilities, and the creation of the mine openings and the waste dump. The vegetation on the estimated 1.5 acre waste-rock dump site will be destroyed as will that on the much smaller areas for the surface plant buildings, the drilling sites for the three ventilation shafts, the ore pad near the adit portal and the necessary access roads. The total land area involved will probably range from 3 to 4 acres. As provided for under the terms of the lease, reclamation and revegetation of these areas upon completion of the mining operation will not be difficult or unduly expensive. Sealing of the adit portal and filling the ventilation shafts with waste rock will also be uncomplicated and relatively inexpensive procedures.

### Determination

From the foregoing information, it is concluded that the proposed mining plan does not constitute a major Federal action significantly affecting the quality fo the human environment in the sense of NEPA, Section 102(2)(c).

Philip B. Mudgett

Philip B. Mudgett

Mining Engineer
U. S. Geological Survey

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#### SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION

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